



Edinburgh
Regional
Computing
Centre

fortran trendsetters

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Edinburgh
Regional
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fortran trendsetters

an ERCC seminar

Wednesday, May 28

2.15pm to 5pm

Thursday, May 29

9.30am to 5pm

Lecture Theatre 2
The King's Buildings
Edinburgh

Registration forms obtainable from ERCC

* PAPERS TO BE PRESENTED AT THE SEMINAR *

COMPILER DESIGN	Lingua franca
Fortran extensions <i>by Mr D. Hendry, Institute of Computer Science, London University</i>	<i>by Mr D.T. Muirworthy, Edinburgh Regional Computing Centre</i>
Fortran standardisation <i>by Mr K.F. James, Systems Programming Division, ICL</i>	Co-operative statistical programming in Fortran <i>by Dr J.A. Nelder, Head of Statistics Dept, Rothamsted Experimental Station</i>
Design considerations for multiple access Fortran <i>by Dr J. Larmouth, Cambridge University Mathematical Laboratory</i>	Fortran IV: Will it fossilize, or can it be a foundation for progress in programming? <i>by Mr D.H. Rees, Head of Computer Dept Rothamsted Experimental Station</i>
A Fortran compiler for the Edinburgh Multi-access System <i>by Mr G.E. Millard, Edinburgh Regional Computing Centre</i>	Writing and running Fortran compilers for London University users <i>by Dr H.J. Zell, London University Computer Centre</i>
The Michigan Time-sharing System <i>by Dr T. Pinkerton, Michigan University and Dept of Computer Science, Edinburgh University</i>	THE UNIVERSITY TEACHER
Using a Fortran compiler in a multi-access installation <i>by Dr I. Pyle, AERE, Harwell</i>	Programming languages - requirements for teaching <i>by Prof. M. Rogers, Computer Unit, Bristol University</i>
Program structures for multi-access environments <i>by Mr H. Whitfield, Dept of Computer Science, Edinburgh University</i>	Computing for non-specialists <i>by Dr P.A. Samet, Director of Computer Centre, University College, London</i>
THE USER	Teaching programming languages <i>by Prof. S. Michaelson, Dept of Computer Science, Edinburgh University</i>
Interchange of Fortran programs between installations <i>by Dr D.C.S. Allison, Queen's University of Belfast</i>	THE REGIONAL COMPUTING CENTRE WILL BE OPEN TO VISITORS FROM 5.30 P.M. TO 6.30 P.M. ON WEDNESDAY, MAY 28.

REGISTRATION FORM

I wish to attend the Fortran Trendsetters seminar on May 28 & 29, 1969, for which I enclose the registration fee of 5s.

Name

Address/Department

* I require lunch on Thursday for which I enclose an additional payment of 15s.

** Please book a *single/double* room in a *local/city centre* hotel in the price range 30-50s/*60-70s/*70-90s per person from to

Special requirements:

*(*City centre only)*

** PLEASE DELETE IF NOT REQUIRED

This form, together with the appropriate payment, should be returned not later than April 30, 1969, to

The Program Librarian
Edinburgh Regional Computing Centre
The King's Buildings
Edinburgh 9

Cheques or Postal Orders should be made payable to "The University of Edinburgh"

GENERAL INFORMATION

Location

All papers will be presented in Lecture Theatre 2 in the School of Engineering Science, University of Edinburgh, The King's Buildings, Mayfield Road, Edinburgh 9.

Timing

The seminar will be held from 2.15 p.m. until 5 p.m. on Wednesday May 28 and from 9.30 a.m. until 5 p.m. on Thursday May 29, 1969. There will be opportunity for discussion after each paper.

Meals and refreshments

The cost of morning and afternoon refreshments is included in the registration fee of 5s. A set lunch can be provided on Thursday for an additional charge of 15s. Payment should accompany the registration form.

Accommodation

The Centre can arrange to book overnight accommodation in a local or city centre hotel. Please state on the registration form any preferences for location, price range, private bathroom, etc.

EDINBURGH REGIONAL COMPUTING CENTRE
"FORTRAN TRENDSETTERS" SEMINAR

TIME TABLE

<u>Wednesday, 28th May, 1969</u>	<u>Thursday, 29th May, 1969</u>
<u>Chair</u>	<u>Chair</u>
	9.00 a.m. Mr K.F. James Dr G.E. Thomas Mr D. Hendry *(Q/A session)
	10.15 a.m. Tea Break
	10.30 a.m. Dr D.C.S. Allison Mrs M.M. Barritt Mr D.T. Muxworthy Dr J. Nelder Dr H.J. Zell Mr D. Rees *(Q/A session)
12.30 p.m. Lunch	12.20 p.m. Lunch
2.15 p.m. Compiler Design Introduction Mrs M.M. Barritt	
2.30 p.m. Dr T. Pinkerton Mr G. E. Millard Dr I. Pyle *(Q/A session)	2.15 p.m. Prof. M. Rogers Mrs M.M. Barritt Dr P.A. Samet Prof. S. Michaelson
3.45 p.m. Tea Break	3.30 p.m. Tea Break
4.00 p.m. Dr J. Larmouth Mr H. Whitfield	3.45 p.m. Discussion
5.00 p.m. Close (Delegates are invited to visit the Regional Centre between 5.00 and 6.30 p.m. on 28th May).	4.45 p.m. Conclusion Dr G.E. Thomas 5.00 p.m. Close

EACH SPEAKER WILL HAVE A WARNING LIGHT AT 15 MINUTES AND CUT-OFF AT 20 MINUTES

*Question and Answer Session

Background to the Edinburgh Regional Computing Centre

1969 FORTRAN Seminar

The Regional Centre interest in FORTRAN stems from the need to provide a proportion of the Edinburgh community of Users with the means of continuing access on a local computer to a programming language which is accepted internationally and in which reputable programs are available and easily transferable. The selection of FORTRAN as distinct from Algol or PL1 was simplified by an existing commitment to maintain a local language (IMP) which had been derived from Atlas Autocode, and which reproduced the attractive features of Algol and could be developed in the light of experience gained with languages such as PL1.

A requirement therefore arises that the Centre shall provide and maintain suitable FORTRAN compilers for the 4-75 installation for which an operating system is being written in Edinburgh (EMAP) by a joint team of University and ICL staff based on the Department of Computer Science.

It is hoped that this Seminar will stimulate discussion on design trends in both the structure and facilities of language compilers in general and FORTRAN in particular.

"Fortran Trendsetters" Seminar

Delegates

H. D. Abramson	Computing Laboratory, University of St. Andrews
Mrs. L. D. Aitken	Edinburgh Regional Computing Centre
W. Aitken	Edinburgh Regional Computing Centre
J. L. Allan	Department of Computer Science, Heriot-Watt University
P. U. Allan	Department of Computer Science, Heriot-Watt University
Dr. D. C. S. Allison	Queens University, Belfast
Mr. Anderson	Agricultural Research Council, Poultry Research Centre, University of Edinburgh
H. Ashcroft	Central Technical Services, Reactor Group, U.K. Atomic Energy Authority, Risley
M. Avis	Edinburgh Regional Computing Centre
A. Balfour	Department of Computer Science, Heriot-Watt University
K. Barclay	Department of Computer Science, Heriot-Watt University
D. F. Barnard	Architecture and Planning Research Unit, University of Edinburgh
Ms. M. M. Barritt	Edinburgh Regional Computing Centre
E. I. Bodger	Chemistry Department, University of Dundee
D. Brennan	Control Data Ltd.
P. J. Buckley	International Computers Ltd.
G. M. Bull	Hatfield Polytechnic
D. G. Burnett-Hall	Department of Computation, University of York
Mrs. V. Calderbank	U.K. Atomic Energy Authority, Culham Laboratory
D. Candlin	Institute of Mathematical Physics, University of Edinburgh
Mrs. R. Candlin	Department of Computer Science, University of Edinburgh
L. J. Capstick	I.B.M.
R. G. Clark	Chemistry Department, University of Dundee
T. R. Clayton	International Computers Ltd.
K. F. Clements	G.P.O. Technical Headquarters
A. J. Cole	Computing Laboratory, University of St. Andrews
D. W. J. Coleman	International Computers Ltd.
Miss S. Copland	Department of Computer Science, Heriot-Watt University
R. J. Cowe	Department of Computer Science, University of Edinburgh
D. W. J. Cox	Department of Mathematics, Glamorgan College of Technology
C. J. Crook	Department of Computer Science, Heriot-Watt University
P. J. Cropper	International Computers Ltd.
F. P. Daly	Management Services Division, South of Scotland Electricity Board
A. J. T. Davie	Computing Laboratory, University of St. Andrews
R. H. Davis	Department of Computer Science, Heriot-Watt University
C. Dean	I.B.M.
Mr. Dodwell	National Data Processing Service
Miss M. Duffy	Department of Computer Science, Heriot-Watt University
J. Ellenby	Edinburgh Regional Computing Centre/Department of Computer Science, University of Edinburgh
D. E. Evans	Centre for Computing & Automation, Imperial College of Science and Technology
T.H. Fairlie	Education Offices, Edinburgh
M. Falla	Department of Computer Science, University of Edinburgh/ International Computers Ltd.
Dr. G. Fast	Universitair Reken Centrum, University of Nijmegen
R. H. Faucett	College of Agriculture, University of Edinburgh
Miss A. Finch	Edinburgh Regional Computing Centre
A. C. Finch	Department of Forestry & Natural Resources, University of Edinburgh

Dr. E. J. Fish	Department of Civil Engineering, University of Nottingham
M.M. Fisher	Edinburgh Regional Computing Centre
Dr. E. D. Ford	Department of Forestry & Natural Resources, University of Edinburgh
G. B. Fox	International Computers Ltd.
E. Foxley	University of Nottingham
J. L. Fyfe	Scottish Plant Breeding Station
M. J. Garside	Computing Laboratory, University of Kent
J. Gilchurst	I.B.M.
Dr. J. Gilmour	College of Agriculture, University of Edinburgh
D. A. Godfrey	Department of Computer Science, Heriot-Watt University
Mr. Greenwood	University of Keele
P. Hammersley	Mathematical Laboratory, University of Cambridge
Mrs. J. Harding	Agricultural Research Council, Unit of Statistics, University of Edinburgh
Miss D. Harveson	O & M/Computer Division, Edinburgh Corporation
E. Hendriksen	Edinburgh Regional Computing Centre
D. Hendry	Institute of Computer Science, University of London
Dr. F. Hertweck	Institut für Plasmaphysik GmbH.
A. J. Heyes	International Computers Ltd.
Mrs. A. J. Heyes	International Computers Ltd.
P. G. Hibbard	Department of Computational & Statistical Science, University of Liverpool
P. M. Hibbert	OR & MT Department, ICI_ Ltd. (Plastics Division)
V. Hodge	Computer Science/International Computers Ltd.
C. Holden	Department of Computer Science, Heriot-Watt University
I. Hogg	Department of Computer Science, Heriot-Watt University
P. F. Holland	British Steel Corporation
Mrs. J. Hornby	Edinburgh Regional Computing Centre
M. J. Houghton	Computer Services, London School of Economics
Mrs. S. A. Houston	International Computers Ltd.
R. B. Hunter	Department of Computer Science, University of Strathclyde
G. Hutton	Department of Computer Science, Heriot-Watt University
E. B. James	Centre for Computing & Automation, Imperial College of Science & Technology.
K. F. James	International Computers Ltd.
R. John	Edinburgh Regional Computing Centre
C. B. C. Johnson	Technical Support Unit, Ministry of Technology
G. Jolly	Agricultural Research Council, Unit of Statistics, University of Edinburgh
D. A. Jones	Computing Department, University of Glasgow
C. H. Kaplinsky	Computer Unit, Westfield College, London
A. C. Kilgour	Department of Computer Science, University of Edinburgh
J. W. B. King	Animal Breeding Research Organisation, University of Edinburgh
P. J. H. King	Computer Unit, University College of Wales, Aberystwyth
Mrs. A. Kruzycka	Computer Unit, University of Stirling
Miss S. Laflin	Computer Centre, University of Birmingham
Dr. J. Larmouth	Mathematical Laboratory, University of Cambridge
Dr. D. Leach	Mathematics Department, Napier College of Science & Technology, Edinburgh
J. Leggate	Department of Computer Science, Heriot-Watt University
M. Leigh	Imperial College of Science & Technology
P. S. Lighthart	Reken Centrum, University of Nijmegen
Dr. Lindsay	Edinburgh Royal Infirmary
H. MacFadzean	I.B.M.
D. J. Mackay	O & M/Computer Division, Edinburgh Corporation
C. K. Mackinnon	U.K. Atomic Energy Authority

A. M. MacLean	B.P. Chemicals, Grangemouth
Mr. Macmillan	University of Glasgow
R. Mahoney	Computation Department, University College of Wales Swansea
E. R. Mansion	Edinburgh Regional Computing Centre
Miss C. Marr	Edinburgh Regional Computing Centre
D. H. Marwick	Department of Computer Science, Heriot-Watt University
C. D. McArthur	Edinburgh Regional Computing Centre
R. A. McLauchlin	Computer Laboratory, Queen's University, Belfast
A. J. McTernan	Department of Computer Science, Heriot-Watt University
Professor S. Michaelson	Department of Computer Science, University of Edinburgh
M. Micher	Bulgarian Management Development Centre
G. E. Millard	Edinburgh Regional Computing Centre
I. Miller	Department of Computer Science, University of Strathclyde
L. S. Monteiro	Animal Breeding Research Organisation, University of Edinburgh
M. Moores	Edinburgh Regional Computing Centre
Mr. Morely-Jones	Agricultural Research Council, Poultry Research Centre, University of Edinburgh
P. A. Morton	Computer Unit, University of Exeter
J. Morven-Wilson	Computing Department, University of Glasgow
J. M. Murison	Edinburgh Regional Computing Centre
Dr. Murray	Department of Computing, University of Aberdeen
D. T. Muxworthy	Edinburgh Regional Computing Centre
Dr. J. A. Nelder	Department of Statistics, Rothamsted Experimental Station
Dr. A. W. Nichol	Department of Physics, University of Exeter
F. O. O'Brien	Imperial College of Science & Technology
D.D.M. Ogilvie	Edinburgh Regional Computing Centre
Dr. J. V. Oldfield	Department of Computer Science, University of Edinburgh
R. Palmer	University of Exeter
N. Papasimakopoulos	Edinburgh
D. G. Paterson	O & M/Computer Division, Edinburgh Corporation
H. D. Patterson	Agricultural Research Council, Unit of Statistics, University of Edinburgh
Dr. T. Pinkerton	University of Michigan/Department of Computer Science, University of Edinburgh
A. F. Purser	Agricultural Research Council, Animal Breeding Research Organisation, University of Edinburgh
Dr. I. Pyle	Atomic Energy Research Establishment, Harwell
S. J. Rappolt	International Computers Ltd.
D. H. Rees	Computer Department, Rothamsted Experimental Station
D. J. Rees	Edinburgh Multi-Access Project
J. R. Reeves	Computing Service, University of Southampton
A. Renshaw	Architecture & Planning Research Unit, University of Edinburgh
Professor M. Rogers	Computer Unit, University of Bristol
A. L. Rowe	Computing Department, University of Glasgow
B.F. Rule	Department of Computing, University of Aberdeen
W. S. Russell	Agricultural Research Council, Animal Breeding Research Organisation, University of Edinburgh
Dr. P. A. Samet	Computer Centre, University of London
Dr. P. D. Schofield	Department of Computer Science, University of Edinburgh
I. Smith	Computing Department, University of Glasgow
J. A. R. Smith	Department of Computer Science, Heriot-Watt University
Dr. B. Spratt	Computing Laboratory, University of Kent
Dr. G. Stacey	Edinburgh Regional Computing Centre
Miss I. Stevens	Department of Computer Science, Heriot-Watt University
Dr. D. G. Stevenson	B.P. Chemicals (U.K.) Ltd., Grangemouth

D. J. W. Stone	Department of Computer Science, University of Glasgow
C. S. Taylor	Animal Breeding Research Organisation, University of Edinburgh
Dr. D. B. Taylor	Edinburgh Regional Computing Centre
R. Taylor	Computer Systems Group, Rutherford Laboratory, Chilton
T. J. Teale	Computer Unit, University of Stirling
M. J. Terry	Atomic Energy Establishment, Winfrith
G. E. Thomas	Edinburgh Regional Computing Centre
J. S. Thomas	Computer Unit, University of Exeter
R. J. Thomas	Department of Computation, University of York
Miss C. M. Thompson	Software Group, Docos House
R. Tough	Computer Services Section, South of Scotland Electricity Board
D. E. Tuffs	International Computers Ltd.
Dr. L. M. Underhill	U.K. Atomic Energy Authority, Risley
W. Watson	Edinburgh Regional Computing Centre
H. Whitfield	Department of Computer Science, University of Edinburgh
M. Woodger	Division of Computer Science, National Physical Laboratory
Dr. H. J. Zell	University of London Computer Centre